

DISCLAIMER: These Standard Operating Procedures (SOP's) are for the exclusive use of Navy Public Works Center (PWC) Norfolk. They are promulgated as guidance for their NAVFAC Commands. If intended to be used by other activities, they must be tailored to each activity's particular requirements and must be reviewed/approved by the activity's safety professionals prior to use.

**NAVY PUBLIC WORKS CENTER
NORFOLK, VIRGINIA
UTILITIES DEPARTMENT**

STANDARD OPERATING PROCEDURE / JOB HAZARD ANALYSIS

TITLE
INSTALL A STREET LIGHT FIXTURE
STREET LIGHT POLE

PROCEDURE NUMBER
WC 624 HVE 032

DISTR:
Code 601C.3
Code 610.E1
Code 620
Code 622
Code 622.3

SIGNED: _____
(DATE)

APPROVED: _____
(DATE)

SAFETY PROFESSIONAL: _____
(DATE)

MANAGEMENT OFFICIAL: _____
(DATE)

DATE: _____ **REVISION DATE:** _____

INSTALL A STREET LIGHT FIXTURE
STREET LIGHT POLE

Procedure:

Procedure to install a new street light fixture.

Potential Energy Sources:

480, 277, 240, or 120 volt street light circuit conductors.

Tools and PPE:

Tools: Bucket truck, shot gun stick, and small hand tools. PPE: Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, insulating rubber gloves, work gloves, orange vest, safety harness, and back brace if required by back injury prevention and control program. The class of rubber gloves and sleeves will depend on the exposure voltage as per the following: Class 0 - up to 1,000 volts, Class 1 - up to 7,500 volts, Class 2 - up to 17,000 volts, Class 3 - up to 26,500 volts, Class 4 - up to 36,000 volts.

Preferences:

1. PWC Occupational Safety and Health Program Manual, PWCNORVAINST 5100.33E
2. SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck
3. Occupational Safety and Health Standards for General Industry (29 CFR PART 1910): Subpart I, Personnel Protective Equipment; Subpart R, Electrical Power Generation / Transmission / Distribution; Subpart S, Electrical
4. NFPA 70 E, Approach Distances To Exposed Energized Electrical Conductors and Circuit Parts
5. ANSI C2-1987, National Electrical Safety Code
6. PWC, Code 600, Lockout and Tagout Procedures

Procedures:

1. Deenergize street light circuit. Lockout and tagout per Lockout and Tagout procedures(WC 622 HVE 013). If the street light circuit is a 480 volt one, the person executing this step should wear Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, and insulating rubber gloves.

Note - If high voltage switching is involved in the step, then Work Center 622 personnel will have to perform the switching operations as per SOPs

WC 622 HVE 007, Switchout And Switchback Energized Circuit
WC 622 HVE 013, Hazardous Energy Control(Lockout, Tagout)

2. Set up bucket truck. Refer to SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger truck for details.
3. When operating a bucket truck the following safety rules will be followed.
 - a) Only an authorized person, one with a current government license to operate an aerial lift, will operate the bucket.
 - b) Do not use the bucket truck if winds exceed the truck manufacture's

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specified limit.

- c) Do not perform energized work in wet weather.
- d) Personnel in bucket will wear a safety harness with a lanyard attached to the boom or bucket.
- e) Do not exceed the bucket's weight limitations.
- f) Stand firmly on the floor of the bucket with both feet. Do not sit on the bucket's edge or use planks, ladders, or other such devices.
- g) If ground personnel are present, then at least one of them will have been trained to operate the bucket in an emergency situation where the bucket personnel are no longer able to operate the bucket controls.

4. Verify circuit is dead at the fixture. Check with approved potential tester. If the street light circuit is a 480 volt one, the person executing this step should wear Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, and insulating rubber gloves. Once circuit conductors are tested and verified to be deenergized the bucket person can remove the Nomex coveralls, Nomex hood, insulating rubber gloves, and the safety glasses.

5. Mount new fixture. Check fixture for proper voltage. Mount fixture to arm and reconnect wires according to manufacture's wiring diagram. Wire photocell if required. Install lamp. PPE is as per Step 4 plus work gloves.

6. Reenergize circuit per lockout tagout procedure. If the street light circuit is a 480 volt one, the person executing this step should wear Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, and insulating rubber gloves.

7. Check replacement light and photocell operation. If the street light circuit is a 480 volt one, the person executing this step should wear Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, safety harness, and insulating rubber gloves.

8. Secure bucket truck. Refer to SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck, for details.

END